Small Business Innovation Research/Small Business Tech Transfer

# ElastiGlass Barrier Film and Food Processing Techniques for the 3-to-5 Year Shelf-Stable Food Package, Phase I



Completed Technology Project (2006 - 2006)

#### **Project Introduction**

Current interests within the National Aeronautics and Space Administration (NASA) foresee extension of exploratory space missions to the Moon, Mars, and beyond. Realization of these targets will require development of a range of advanced technologies including life support systems. Food represents one of the most crucial components of life support, as the ability to supply safe, nutritious and organoleptically pleasing meals to space flight personnel for the duration of their mission will be of paramount importance in maintaining crew functionality and morale. In this Phase I Small Business Innovation Research (SBIR) program, Infoscitex Corporation will develop an advanced barrier film, ElastiGlass, which will enable 3-to-5 year shelf life, with the added benefit of reducing the logistic burdens associated with waste handling, and minimizing package weight and storage space requirements. Follow-on efforts will focus on the development of food preparation and packaging processes that will ensure near zero oxygen content within the sealed food pouch. Specific benefits of ElastiGlass thermostabilized food pouches will include: increased shelf-life (3 to 5 years), reduced weight, reduced waste, zero metal content, and optical transparency.

#### **Primary U.S. Work Locations and Key Partners**





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### Organizational Responsibility

# Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

#### Lead Center / Facility:

Johnson Space Center (JSC)

#### **Responsible Program:**

Small Business Innovation Research/Small Business Tech Transfer



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Organizations Performing Work	Role	Туре	Location
	Lead	NASA	Houston,
	Organization	Center	Texas
Infoscitex	Supporting	Industry	Waltham,
Corporation	Organization		Massachusetts

Primary U.S. Work Locations	
Massachusetts	Texas

### **Project Management**

#### **Program Director:**

Jason L Kessler

#### **Program Manager:**

Carlos Torrez

## **Technology Areas**

#### **Primary:**

- TX07 Exploration Destination Systems
  - ☐ TX07.2 Mission
     Infrastructure,
     Sustainability, and
     Supportability
     ☐ TX07.2.1 Logist
    - ☐ TX07.2.1 Logistics Management

